Notice of Allowability	Application No.	Applicant(s)	
	10/507,493	EDWIN ET AL.	
	Examiner	Art Unit	
	Samir M. Shah	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *8/02/2006*.

2. ☒ The allowed claim(s) is/are *1-13*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Samir M. Shah

Allowance

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/30/2006 has been entered.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Mr. Alan Kagen on 08/16/2006.

4. The application has been amended as follows:

As to claim 1, last line, delete "derived from output of the detector" and replace it with -- derived only from the output of the single detector --.

As to claim 11, line 3, delete "a single detector" and replace it with -- a one and only one detector --.

Reasons for Allowance

5. Claims 1-13 are allowed.

6. The following is an examiner's statement of reasons for allowance:

(a) As to claim 1, note is made of the limitations "a single detector", "guides...arranged to contact a surface of the pipe when the detector is in contact with the pipe", "the detector and the guides are in contact with the pipe surface at different points around its circumference" and "output related to the deformation...is derived only from the output of the single detector" in combination with the rest of the limitations in the claim

(b) As to claim 11, note is made of the limitations "one and only one detector", "the detector and the rotatable members are in contact with the pipe surface at different points around its circumference", and "measuring the radial displacement of the detector...output related to the deformation" in combination with the rest of the limitations in the claim.

(c) As to claims 1 and 11, the closest reference, Bellwood (US Patent 4,903,413 henceforth "Bellwood") discloses an apparatus for detecting deformation of a surface of a pipe/workpiece (10), including a detector/dynamic probe (18) capable of detecting changes in the radius of a pipe/workpiece (10) when placed in contact with the surface of the pipe/workpiece (10) (column 3, lines 46-67), a guide assembly/probes (14, 16), with toroidal feet (22, 24), capable of guiding the detector/dynamic probe (18) along the surface of the pipe/workpiece (10) in a direction parallel with the longitudinal axis of the pipe/workpiece (10), said detector/dynamic probe (18) and said toroidal feet (22, 24)

being moveable in a radial direction of the pipe at the point of contact (figure 1; column 3, lines 3-27), wherein the guide assembly/probes (14, 16) comprises feet (22, 24) provided on each side of the detector/dynamic probe (18) being positioned substantially along an arc such that in use, the detector/dynamic probe (18) and the feet (22, 24) are in contact with the pipe/workpiece (10) surface at different points around its circumference, a circumferential distance between each said foot (22 or 24) and the detector/dynamic probe (18) being smaller than a radius of the arc (figure 1); and measurement means/transducer stator (20) capable of measuring the radial displacement of the detector, thereby to produce an output related to the position of the dynamic probe (18) relative to a yoke (12) (figure 1; column 3, lines 2-7).

Thus, since Bellwood's apparatus comprises a plurality of probes/detectors (14, 16, 18), it fails to disclose "a single detector" or "one and only one detector", and "rotatable members" as defined in claims 1 and 11 of the instant invention.

(d) As to claim 1, the closest reference, Whitehouse (US Patent 4,084,324 henceforth "Whitehouse") discloses a surface measurement apparatus for measuring deformation of a surface including a sensor (11) carrying three probes (12, 13, 14) capable of directly detecting changes in the radius of a pipe (column 5, lines 65-67; column 7, lines 47-51); a plurality of guides/wheels (24) for guiding the detector along the pipe in a direction parallel to a longitudinal axis of the pipe (figures 4 and 5; column 8, line 13); the guides comprising rotatable members/wheels (24) spaced apart from the detector and arranged to contact a surface (15) of the pipe when the detector/transducer (13) is in contact with the pipe (figures 4 and 5), wherein said

guides/wheels (24) are respectively provided on each side of the detector/transducer (13); the rotatable members/wheels (24) and the detectors/probes (12, 13, 14) being positioned substantially along an arc such that in use, the detectors/probes (12, 13, 14) and the guides/wheels (24) are in contact with the pipe surface (15) at different points around its circumference, and a circumferential distance between each said rotatable member of the guides/wheels (24) and the detectors/probes (12, 13, 14) is smaller than a radius of the arc (figure 5); whereby an output related to the deformation of the pipe surface (15) is derived from a composite signal produced by the combination of the plurality of signals from the plurality of transducers/probes (12, 13, 14) (column 5, lines 55-68).

Thus, Whitehouse fails to disclose "a single detector" or "one and only one detector" as defined in claims 1 and 11 of the instant invention.

(e) Therefore, the prior art neither teaches nor provides a motivation to combine the above-mentioned limitations in combination with rest of the limitations in the claims 1 and 10.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. The prior art made of record and not relied upon, cited in the attached 892 form, is considered pertinent to applicant's disclosure.

US Patent 6,568,096 B1 to Svitkin et al. discloses a "device and method for measuring shape deviations of a cylindrical workpiece", which is similar to the current invention, but Svitkin's device has a plurality of sensors/detectors (9, 14, 18).

US Patent 4,050,293 to Shimomura et al. discloses a "device for detecting unevenness of a curved surface", which is similar to the current invention, but Shimomura's device includes a detector (40) and guides (10, 11) which travel in a directional perpendicular to the axial direction, which is not "in a direction parallel to a longitudinal axis of the pipe" as defined in claims 1 and 11 of the current invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir M. Shah whose telephone number is (571) 272-2671. The examiner can normally be reached on Monday-Friday 9:30 am to 6:00 pm.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samir M. Shah
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8/16/2006

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